LaJuana S. Wilcher Secretary

AIR QUALITY PERMIT

Issued under 401 KAR 52:020 Title V Permits Ernie Fletcher Governor



Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Permittee Name: CITY UTILITY COMMISSION, HENDERSON, KY
Mailing Address: 100 Fifth Street, PO Box 8, Henderson, KY 42420

is authorized to construct and operate an electric power generating plant

Source Name: HENDERSON MUNICIPAL POWER & LIGHT, STATION ONE

Mailing Address: P.O. Box 8, Henderson, KY 42420

Source Location: 100 Fifth Street, Henderson, KY 42420

Source ID #: 21-101-00012 SIC Code: 4911

Activity #: APE20040001 County: Henderson

Source AI #: 38450

Permit Number: V-04-002 Permit Type: Title V/Acid Rain/NOx Budget

Regional Office: Owensboro Completion Date: December 28, 2003
3032 Alvey Park Drive W Ste 700 Issuance Date: December 23, 2004

3032 Alvey Park Drive W., Ste 700 Issuance Date: December 23, 2004 Owensboro, KY 42303-2191 Expiration Date: December 23, 2009

(270) 687-7304 Expiration Date. December 25, 20

John C. Lyong Diverton

John S. Lyons, Director Division for Air Quality

DEP7001 (6-97) *Revised: 07/10/03*

Henderson Municipal Power & Light, Station 1 Subject Item Inventory

Activity ID No.: APE20040001

Subject Item Inventory:

ID	Designation	Description
AIOO38450	Source	General Conditions
COMB1	Emission Unit 01 (Unit 5)	Indirect Heat Exchanger, Spreader Stoker Maximum Capacity: 174 mmBtu/hr Constructed or last Modified: 1955 Fuel: Bituminous or Subbituminous Coal Controls: Multiclone Wood/Fuel Oil for start up
COMB2	Emission Unit 02 (Unit 6)	Indirect Heat Exchanger, Spreader Stoker w/ Flyash Reinjection Maximum Capacity: 390 mmBtu/hr Constructed or last Modified: 1968 Fuel: Bituminous or Subbituminous Coal Controls: Multiclone and Electrostatic Precipitator Wood/Fuel Oil for start up
EQPT1	Emission Unit 03 (EP-3)	Diesel Generator Maximum Capacity: 1630 hp Constructed or last Modified: 1949 Fuel: Number 2 Fuel Oil Controls: None
EQPT2	Emission Unit 04 (EP-4)	Diesel Generator Maximum Capacity: 1630 hp Constructed or last Modified: 1949 Fuel: Number 2 Fuel Oil Controls: None
EQPT3	Emission Unit 05 (EP-5)	Receiver hopper, Conveyor #1, Conveyor #2, Conveyor #3, Primary crusher, and Coal stockpile Maximum Capacity: 200 tons/hr Constructed or last Modified: 1968 Controls: None
EQPT4	Insignificant Activity 01	INSIGNIFICANT - No. 2 fuel oil tank (maximum size is 500 gallons)
EQPT5	Insignificant Activity 02	INSIGNIFICANT - Lube oil tanks
EQPT6	Insignificant Activity 03	INSIGNIFICANT - Chemical feed tanks

Henderson Municipal Power & Light, Station 1 Subject Item Inventory

Activity ID No.: APE20040001

ID	Designation	Description
EQPT7	Insignificant Activity 04	INSIGNIFICANT - Maintenance shop degreaser

Subject Item Groups:

ID	Description	Components
GACT1	Two 1630 hp Diesel Generators	EQPT1 Diesel Generator
		Maximum Capacity: 1630 hp
		Constructed or last Modified: 1949
		Fuel: Number 2 Fuel Oil
		Controls: None
		EQPT2 Diesel Generator
		Maximum Capacity: 1630 hp
		Constructed or last Modified: 1949
		Fuel: Number 2 Fuel Oil
		Controls: None
GACT2	Insignificant Activities 1 - 4	EQPT4 INSIGNIFICANT - No. 2 fuel oil tank (maximum size is 500 gallons)
		EQPT6 INSIGNIFICANT - Chemical feed tanks
		EQPT7 INSIGNIFICANT - Maintenance shop degreaser
		EQPT5 INSIGNIFICANT - Lube oil tanks

KEY	
ACTV = Activity	AIOO = Agency Interest
AREA = Area	COMB = Combustion
EQPT = Equipment	MNPT = Monitoring Point
PERS = Personnel	PORT = Transport
STOR = Storage	STRC = Structure

Henderson Municipal Power & Light, Station 1 Subject Item Inventory

Activity ID No.: APE20040001

KEY	

TRMT = Treatment

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

AIOO38450 (Source) General Conditions:

Page 1 of 27

Submittal/Action Requirements:

Condition

No. Condition

S-1 SEMIANNUAL REPORTS:

The permittee shall submit report(s): Due semiannually, by the 30th of January and July to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. This report shall be a summary of any monitoring required by this permit, other than continuous emission or opacity monitors. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1b (V)1]. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official [401 KAR 52:020, Section 23]. Data from all continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, Section 3(3). [401 KAR 52:020 Section 26]

S-2 EMISSION EXCEEDANCES:

The owner or operator shall submit report(s): Due within thirty (30) days of emission related exceedances from permit requirements, including those attributed to upset conditions (other than emission exceedances covered by Requirement D.5); to the Regional Office listed on the front of this permit. Other deviations from permit requirements shall be included in the semiannual reports required by Condition No S-1. [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1b V(3) and (4)]. [401 KAR 52:020 Section 26]

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Submittal/Action Requirements:

No. Condition
Condition

S-3 COMPLIANCE CERTIFICATION:

The permittee shall certify compliance with the terms and conditions contained in this permit and shall submit compliance certification: Due annually, by the 30th of January to the Regional Office listed on the front of this permit. Compliance Certification Form (DEP 7007CC) (or an approved alternative) shall be used in accordance with the following requirements:

- a. Identification of each term or condition:
- b. The compliance status regarding each term or condition of the permit;
- c. Whether compliance was continuous or intermittent; and
- d. The method used for determining the compliance status for the source, currently and over the reporting period.
- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the year covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the Regional Office listed on the front of this permit and the following addresses:

U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601. [401 KAR 52:020 Section 21] Page 2 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Submittal/Action Requirements:

Condition	
No.	Condition
S-4	PERFORMANCE TEST NOTICE AND REPORT:
	Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
	For any performance test(s) required by this permit, the permittee shall submit performance/emission test results: Due within 45 days of the completion of the fieldwork to the Division [Policy Manual of the Division of Air Quality, Section VII.3]. [401 KAR 50:016 Section 1(1)]
S-5	PERMIT EXPIRATION AND REAPPLICATION REQUIREMENTS:
	This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate. The permittee shall submit permit application for renewal: Due at least 180 days prior to permit expiration to the Division. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:020 Section 12] The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets. [401 KAR 52:020 Section 8(2)]

Narrative Requirements:

Condition No.	Condition	
T-1	SECTION A.	PERMIT AUTHORIZATION. [401 KAR 52:020]

Page 3 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition	
No.	Condition
T-2	A1. Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.
	The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.
	Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency. [401 KAR 52:020]
T-3	SECTION B. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS. [401 KAR 52:020]
T-4	B1. Compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1b]. [401 KAR 52:020 Section 26]
T-5	B2. Sulfur Dioxide (SO2) and particulate matter (PT) emissions, as measured by methods referenced in 401 KAR 50:015 Section 1, shall not exceed the respective limitations specified herein. [401 KAR Chapter 52]
T-6	SECTION C. SOURCE CONTROL EQUIPMENT REQUIREMENTS. [401 KAR 50:055]
T-7	C1. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [401 KAR 50:055 Section 2(5)]
T-8	SECTION D. MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS. [401 KAR 52:020]

Page 4 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 5 of 27

Narrative Requirements:

Condition No.	Condition
T-9	D.1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include: a. Date, place as defined in this permit, and time of sampling or measurements. b. Analyses performance dates; c. Company or entity that performed analyses; d. Analytical techniques or methods used; e. Analyses results; and f. Operating conditions during time of sampling or measurement [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1b (IV)(1)]. [401 KAR 52:020 Section 26]
T-10	D.2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Cabinet Provisions and Procedures for Issuing Title V Permits, Sections 1b (IV)(2) and 1a (8)]. [401 KAR 52:020 Section 26]
T-11	 D.3. The permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times: a. To access and copy any records required by the permit; b. To inspect any facility, equipment (including monitoring and air pollution control equipment), practice, or operation; and c. To sample or monitor substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency. [401 KAR 52:020 Section 3(1)(h)]
T-12	D.4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Pursuant to 401 KAR 50:060, Section 2(2), refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties. [KRS 77.165, 401 KAR 50:060 Section 2(2)]
T-13	D.5. The owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows: i) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown. ii) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request. [401 KAR 50:055 Section 1]

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition
T-14	D.6. The permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee. If a KEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit. [401 KAR 52:020 Section 3(1)(d)]
T-15	SECTION E. GENERAL PROVISIONS. [401 KAR 52:020]
T-16	E(a) General Compliance Requirements. [401 KAR 52:020]
T-17	E(a)1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (3)]. [401 KAR 52:020 Section 26]
T-18	E(a)2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (6)]. [401 KAR 52:020 Section 26]
T-19	E(a)3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances: a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12; b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements; c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; d. If any additional applicable requirements of the Acid Rain Program become applicable to the source. [Acid Rain sources only] Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency. [401 KAR 52:020 Section 19]

Page 6 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

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Condition No.	Condition
T-20	E(a)4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (7) and (8)]. [401 KAR 52:020 Section 26]
T-21	E(a)5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority. [401 KAR 52:020 Section 7(1)]
T-22	E(a)6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (14)]. [401 KAR 52:020 Section 26]
T-23	E(a)7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (4)]. [401 KAR 52:020 Section 26]
T-24	E(a)8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (15)(b)]. [401 KAR 52:020 Section 26]
T-25	E(a)9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3 (6) [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (10)]. [401 KAR 52:020 Section 26]
T-26	E(a)10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020 Section 11(3)(b)]
T-27	E(a)11. This permit does not convey property rights or exclusive privileges. [Cabinet Provisions and Procedures for Issuing Title V Permits, Section 1a (9)]. [401 KAR 52:020 Section 26]
T-28	E(a)12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency. [401 KAR Chapter 52]
T-29	E(a)13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020 Section 11(3)(d)]
T-30	E(a)14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020 Section 11(3)(a)]

Page 7 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition	
No.	Condition
T-31	E(a)15. Permit shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with: (a) Applicable requirements that are included and specifically identified in the permit and (b) Non-applicable requirements expressly identified in this permit. [401 KAR 52:020 Section 11]
T-32	E(a)16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source. [401 KAR Chapter 51]
T-33	E(b) Permit Revisions. [401 KAR 52:020]
T-34	E(b)1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2). [401 KAR 52:020 Section 14(2)]
T-35	E(b)2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer. [401 KAR 52:020]
T-36	E(d) Acid Rain Program Requirements. [401 KAR Chapter 52]
T-37	E(d)1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable. [401 KAR Chapter 52]
T-38	E(e) Emergency Provisions. [401 KAR 52:020]

Page 8 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition		
T-39	E(e)1. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that: a. An emergency occurred and the permittee can identify the cause of the emergency; b. The permitted facility was at the time being properly operated; c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations are exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken. e. This requirement does not relieve the source from other local, state or federal notification requirements. [401 KAR 52:020 Section 24(1)]		
T-40	E(e)2. Emergency conditions listed in General Condition E(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020 Section 24(3)]		
T-41	E(e)3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020 Section 24(2)]		
T-42	E(f) Risk Management Provisions. [401 KAR Chapter 68]		
T-43	E(f)1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to		
	RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346. [401 KAR Chapter 68]		
T-44	E(f)2. If requested, submit additional relevant information to the Division or the U.S. EPA. [401 KAR Chapter 68]		
T-45	E(g) Ozone depleting substances. [40 CFR 82]		

Page 9 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 10 of 27

Narrative Requirements:

Condition		
No.	Condition	
T-46	E(g)1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B: a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156. b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158. c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161. d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166 e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156. f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [40 CFR 82]	
T-47	E(g)2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. [40 CFR 82]	
T-48	SECTION F. ACID RAIN PERMIT. [401 KAR 52:060]	
T-49	ACID RAIN PERMIT CONTENTS	
	1) Statement of Basis	
	2) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.	
	3) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NOx Compliance Plan.	
	4) Summary of Actions	
	5) SO2 allowances allocated under this permit and NOx requirements for each affected unit (see emission unit specific requirements). [401 KAR 52:060]	

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition	
No.	Condition
T-50	1) Statement of Basis:
	Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and Federal Regulation 40 CFR Part 76. [401 KAR 52:060]
T-51	2) Comments, Notes, and Justifications:
	Affected unit is COMB2 (Unit 6 - 390 mmBtu/hr indirect heat exchanger).
	COMB1 (Unit 5 - 174 mmBtu/hr indirect heat exchanger) currently has no SO2 allowance allocated by U.S. EPA. The unit is not applicable to the Acid Rain Program requirements per 40 CFR 72.6 (b)(2).
	COMB1 (Unit 5 - 174 mmBtu/hr indirect heat exchanger) and COMB2 (Unit 6 - 390 mmBtu/hr indirect heat exchanger) do not have applicable NOx limits set by 40 CFR part 76. [401 KAR 52:060]
T-52	3) Permit Application:
	The Phase II Permit Application, the Phase II NOx Compliance Plan, and the Phase II NOx Averaging Plan are all part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application, the Phase II NOx Compliance Plan, and the Phase II NOx Averaging Plan. [401 KAR 52:060]

Page 11 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 12 of 27

Narrative Requirements:

Condition	
No.	Condition
T-53	4) Summary of Actions:
	Previous Actions:
	1. Final Phase II Permit (# AR-96-16) was issued on December 11, 1996 for COMB2 (Unit 6 - 390 mmBtu/hr indirect heat exchanger).
	2. Determination that units at the facility are not applicable to the Phase II - NOx limitations was made on June 11, 1998.
	3. Phase II Permit (# AR-96-16) expired December 31, 2000.
	4. Title IV Acid Rain Renewal Application was received by the Division for Air Quality on October 6, 2003.
	Present Action:
	1. Draft Title V with Section F Acid Rain Permit has been advertised for public comment. [401 KAR 52:060]

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition
T-54	NOx BUDGET PERMIT

Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Kentucky Environmental and Public Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NOx requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

NOx Budget Permit Application, Form DEP 7007EE

The NOx Budget Permit application for these electrical generating units was submitted to the Division and received on October 29, 2003. Requirements contained in that application are hereby incorporated into and made part of this NOx Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

Affected unit is COMB2 (Unit 6 - 390 mmBtu/hr indirect heat exchanger), due to the applicability of an electric generating unit used to generate 25 megawatts or more of electricity, some of which is offered for sale.

Summary of Actions

The NOx Budget Permit is being issued as part of this Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100. [401 KAR 51:160]

Page 13 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 14 of 27

COMB1 (Emission Unit 01 (Unit 5)) Indirect Heat Exchanger, Spreader Stoker Maximum Capacity: 174 mmBtu/hr

Limitation Requirements:

Condition	l	
No.	Parameter	Condition
L-1	Opacity	Emission into the open air of particulate matter from any existing installations of indirect heat exchangers shall have an Opacity <= 40 % based on a six-minute average except under conditions when:
		- building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations; and
		- cleaning the firebox, or blowing soot, for a period or periods aggregating not more than six minutes in any sixty minutes which is greater than 60% opacity.
		Compliance Demonstration - Refer to Performance Test (T-11), Recordkeeping Requirements (T-7), and Reporting Requirements (T-9) for this unit.
		Limitation. [401 KAR 61:015 Section 4(4)(and)Regulation No. 7] This requirement is applicable during the following months: All Year.
L-2	SO2 (Sulfur Dioxide)	The unit shall have a maximum emission of SO2 (Sulfur Dioxide) <= 6 lb/mm Btu.
		Compliance Demonstration
		Compliance with the sulfur dioxide standard shall be based on AP-42 emission factors, and may be demonstrated by calculating sulfur dioxide emissions using the following formula:
		Sulfur dioxide = [(38 x percent sulfur in coal lb/ton from each weekly composite sample of coal received) divided by (coal heating value from each weekly composite sample of coal received in mmBtu/ton)].
		Limitation. [401 KAR 61:015 Section 5(1)] This requirement is applicable during the following months: All Year.

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Limitation Requirements:

Condition No.	Parameter	Condition
L-3	PT (Particulate Matter)	The unit shall have a maximum emission of PT (Particulate Matter) <= 0.4 lb/mm Btu. Compliance Demonstration The permittee may assure continuing compliance with the particulate emission standard by operating the affected facility and associated control equipment such that the opacity reading by Reference Method 9 does not exceed the upper limit of the indicator range developed from Reference Method 9 readings during the stack tests. If 5% of Reference Method 9 results conducted in a calendar quarter show excursions from the indicator range, the permittee shall contact the Division within 30 days after the end of the quarter to schedule a stack test to demonstrate compliance with the particulate standard while operating at the conditions which resulted in the excursions. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests. Regulation Citation. [401 KAR 61:015 Section 4(4)(and)Regulation No. 7] This requirement is applicable during the following months: All Year.

Narrative Requirements:

Monitoring:

Condition No.	Condition
T-1	Monitoring: The permittee shall monitor the ash and sulfur content of coal by performing analysis on each shipment of coal received. [40 CFR Part 64].
T-2	Monitoring: The rate of fuel burned for each fuel shall be measured daily or at shorter intervals and recorded. The heating value and ash content of fuels shall be ascertained at least once per week. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily. [401 KAR 61:015 Section 6]

Page 15 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 16 of 27

Narrative Requirements:

Monitoring:

Condition No.	Condition
T-3	Monitoring: Compliance Assurance Monitoring (CAM): In order to show compliance assurance with the PT emission limit and assurance of proper function of the control equipment, opacity shall be monitored. The opacity shall be measured from the EPA Reference Method 9 performance testing once per daylight shift, weather permitting (see Performance Test, T-11). The upper limit of the indicator range shall be developed during stack tests (see Performance Test, T-10). The permittee shall operate the affected facility and associated control equipment such that the opacity reading by Reference Method 9 does not exceed the upper limit of the indicator range developed from Reference Method 9 readings during the stack tests (see Limitation Requirements, L-3). If 5% of Reference Method 9 results conducted in a calendar quarter show excursions from the indicator range, the permittee shall contact the Division within 30 days after the end of the quarter to schedule a stack test to demonstrate compliance with the particulate standard while operating at the conditions which resulted in the excursions. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests. [40 CFR Part 64].

Operation:

T-4

Condition	
No.	Condition

Operation: The mechanical collectors shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the manufacturer's specifications and/or good engineering practices.

Recordkeeping Requirements:

Condition No.	Condition
T-5	Recordkeeping Requirements: The permittee shall maintain the records of the fuel analysis.
T-6	Recordkeeping Requirements: The permittee shall maintain records of the following: 1) rate of fuel burned for each fuel on a daily basis; 2) the heating value and ash content on a weekly basis; and 3) the average electrical output and the minimium and maximum hourly generation rate on a daily basis.
T-7	Recordkeeping Requirements: The permittee shall maintain the records of the Reference Method 9 results, the number of excursions above the indicator range, time and date of excursions, opacity value of the excursions, and percentage of the opacity readings showing excursions from the indicator range in each calendar quarter.

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements: **Recordkeeping Requirements:** Condition No. Condition Recordkeeping Requirements: Records regarding the maintenance of the control equipment shall be maintained. T-8 **Reporting Requirements:** Condition No. Condition Reporting Requirements: The permittee shall report the number of excursions above the indicator range, date and time of excursions, opacity value of the T-9 excursions, and percentage of the opacity readings showing excursions from the indicator range in each calendar quarter. **Performance Test:** Condition No. Condition Performance Test: EPA Reference Method 5 or equivalent shall be performed within 1 year from issue of this permit to determine the amount of PM emissions per T-10 ton of coal processed. The heating value of coal used during the test shall be specifically tested and documented. The upper limit of the indicator range shall be developed from the Reference Method 9 readings during the stack tests. The amount of coal combusted (tons), the heating value of coal from a coal analysis (mmBtu/ton), and the calculated emission factor (lbs of PT/mmBtu) shall be documented and reported with the test results. T-11 Performance Test: When the unit is in operation, the permittee shall read, weather permitting, the opacity of emissions from the stack using Reference Method 9 once per daylight shift.

Page 17 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 18 of 27

COMB2 (Emission Unit 02 (Unit 6)) Indirect Heat Exchanger, Spreader Stoker w/ Flyash Reinjection Maximum Capacity: 390 mmBtu/hr

Limitation Requirements:

Condition		
No.	Parameter	Condition
L-1	Opacity	Emission into the open air of particulate matter from any existing installations of indirect heat exchangers shall have an Opacity <= 40 % based on a six-minute average except under conditions when:
		- building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations; and
		- cleaning the firebox, or blowing soot, for a period or periods aggregating not more than six minutes in any sixty minutes which is greater than 60% opacity.
		Compliance Demonstration - Refer to Performance Test (T-11), Recordkeeping Requirements (T-7), and Reporting Requirements (T-10) for this unit.
		Limitation. [401 KAR 61:015 Section 4(4)(and)Regulation 7] This requirement is applicable during the following months: All Year.
L-2	SO2 (Sulfur Dioxide)	The unit shall have a maximum emission of SO2 (Sulfur Dioxide) <= 6 lb/mm Btu.
		Compliance Demonstration
		Compliance with the sulfur dioxide standard shall be based on AP-42 emission factors, and may be demonstrated by calculating sulfur dioxide emissions using the following formula:
		Sulfur dioxide = [(38 x percent sulfur in coal lb/ton from each weekly composite sample of coal received) divided by (coal heating value from each weekly composite sample of coal received in mmBtu/ton)].
		Limitation. This requirement is applicable during the following months: All Year.

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 19 of 27

Limitation Requirements:

T-2

Limitation Requirements.		
Condition No.	on Parameter	Condition
L-3	PT (Particulate Matter)	The unit shall have a maximum emission of PT (Particulate Matter) <= 0.4 lb/mm Btu.
		Compliance Demonstration
		Refer to the continuous opacity monitor (COM) monitoring requirements below.
		Regulation Citation. [401 KAR 61:015 Section 4(4)(and)Regulation No. 7] This requirement is applicable during the following months: All Year.
Narrat	ive Requirements:	
Mo	nitoring:	
Conditio	on	

Condition No.	Condition
T-1	Monitoring: Compliance Assurance Monitoring (CAM): In order to show compliance assurance with the PT emission limit and assurance of proper function of the

Monitoring: Compliance Assurance Monitoring (CAM): In order to show compliance assurance with the PT emission limit and assurance of proper function of the control equipment, opacity shall be monitored from the Continuous Opacity Monitor (COM) (see Monitoring, T-3). The average performance test opacity level, measured by the COM, shall be established during the EPA Reference Method 5 performance testing and used as a factor for the PM emission limit compliance demonstration, under the condition that the EPA Reference Method 5 testing results shows compliance with the PM emission limits for the unit (see Performance Test T-11). The average performance test opacity level, plus 5% opacity, will become the opacity trigger level. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value averaged over a three hour period exceeds the opacity trigger level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs (see Monitoring, T-3). [40 CFR 64]. [401 KAR 52:020]

Monitoring: The permittee shall monitor the heating value, ash and sulfur content of coal by performing analysis on each shipment of coal received. [40 CFR Part 64].

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 20 of 27

Narrative Requirements:

Monitoring:

T-3 Monitoring: Continuous Opacity Monitoring (COM) requirements.

Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). The average performance test opacity level, measured by the COM, shall be established during the EPA Reference Method 5 performance testing and used as a factor for the PM emission limit compliance demonstration, under the condition that the EPA Reference Method 5 testing results shows compliance with the PM emission limits for the unit. The average performance test opacity level, plus 5% opacity, will become the opacity trigger level. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value averaged over a three hour period exceeds the opacity trigger level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity trigger level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by the Performance Test Notice and Report requirements in the General Conditions of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests. [40 CFR 64]. [401 KAR 52:020]

Monitoring: The rate of fuel burned for each fuel shall be measured daily or at shorter intervals and recorded. The heating value and ash content of fuels shall be ascertained at least once per week. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily. [40 CFR Part 64]. [401 KAR 61:015 Section 6]

Operation:

T-4

Condition No.	Condition
T-5	Operation: The mechanical collectors shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the

Operation: The mechanical collectors shall be operated as necessary to maintain compliance with the permitted emission limitations, in accordance with the manufacturer's specifications and/or good engineering practices.

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 21 of 27

Narrative Requirements:

Recordkeeping Requirements:

Condition No.	Condition
T-6	Recordkeeping Requirements: The permittee shall maintain the records of the fuel analysis.
T-7	Recordkeeping Requirements: The permittee shall maintain records of the COM data on a three-hour rolling average basis, the number of excursions above the trigger level, time and date of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the trigger level in each calendar quarter.
T-8	Recordkeeping Requirements: Records regarding the maintenance of the control equipment shall be maintained.
T-9	Recordkeeping Requirements: The permittee shall maintain records of the following: 1) rate of fuel burned for each fuel on a daily basis; 2) the heating value and ash content on a weekly basis; and 3) the average electrical output and the minimium and maximum hourly generation rate on a daily basis.

Reporting Requirements:

Condition No.	Condition
T-10	Reporting Requirements: The permittee shall report the number of excursions, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions in each calendar quarter.

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 22 of 27

Narrative Requirements:

Performance Test:

Condition No.	Condition
T-11	Performance Test: EPA Reference Method 5 or equivalent shall be performed within 1 year from issue of this permit to determine the amount of PM emissions per ton of coal processed. The heating value of coal used during the test shall be specifically tested and documented.
	The opacity shall be recorded from the COM and from EPA Reference Method 9 readings during the stack tests and reported with the test results. The amount of coal combusted (tons), the heating value of coal from a coal analysis (mmBtu/ton), and the calculated emission factor (lbs of PT/mmBtu) shall be documented and reported with the test results. Opacity data from the Continuous Opacity Monitor (COM) obtained during the performance test shall be correlated with the particulate emission rate. The average performance test opacity level, measured by the COM, shall be established during the EPA Reference Method 5 performance testing and used as a factor for PM emission limit compliance demonstration, under the condition that the EPA Reference Method 5 testing results shows compliance with the PM emission limits for the unit.
T-12	Performance Test: EPA Reference Method 9 shall be performed whenever EPA Reference Method 5 testing is performed. All results shall be documented. In addition, COM data shall also be documented during the same testing time interval.
Condition	
No.	Condition
T-13	ACID RAIN PERMIT

SO2 Allowance Allocations and NOx requirements for the affected unit: [401 KAR 52:060]

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Narrative Requirements:

Condition No.	Condition	on
T-14	SO2 Allo	owances (Table 2,3, or 4 of 40 CFR Part 73)
	2004 2005 2006 2007	810* 810* 810*
	2007 2008 2009	810* 810* 810*

^{*} The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (See 40 CFR 72.84). [401 KAR 52:060]

Page 23 of 27

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 24 of 27

EQPT3 (Emission Unit 05 (EP-5)) Receiver hopper, Conveyor #1, Conveyor #2, Conveyor #3, Primary crusher, and Coal stockpile Maximum Capacity: 200 tons/hr

3 T	D .	
Narrative	Requirements:	
Ivalianve	requirements.	

Applicable Regulations:

Condition No. Condition

T-1 Applicable Regulations: Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality. [401 KAR 63:010 Section 1]

Additional Limitations:

Condition No. Condition T-2 Additional Limitations: No person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate. In addition, reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including the materials processed at each unit listed above shall be controlled with wet suppression and/or enclosures so as to comply with the standards specified in Section 3 of 401 KAR 63:010, Fugitive emissions.

Compliance Demonstration

Observations and records, if applicable, shall be utilized to document failure to comply. Otherwise, compliance is assumed when daily observations indicate that the processes and controls are operating normally.

Limitation. [401 KAR 63:010 Section 3]

Reports and Submittals:

Candition

No.	Condition
T-3	Reports and Submittals: See Semiannual Reports, Compliance Certification, and Section D1, and D2 of this permit. [401 KAR 52:040 Section 10]

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 25 of 27

Narrative Requirements:

Monitoring:

Condition No.	Condition
T-4	Monitoring: The permittee shall monitor the amount of coal received and processed through each piece of conveying or handling equipment, including stockpiles, on a monthly basis.
T-5	Monitoring: Visible emissions from each piece of equipment or operation described for this item or group shall be monitored daily during daylight hours to determine whether conditions appear to be normal or abnormal. If the emissions appear to be abnormal, the permittee must then comply with the deviation reporting described in Section D of this permit.

Recordkeeping Requirements:

Condition No.	Condition
T-6	Recordkeeping Requirements: See Sections C1, C2, and G1 of this permit. [401 KAR 52:040 Section 10]
T-7	Recordkeeping Requirements: Visible emissions from each piece of equipment or operation described for this item or group shall be monitored daily during daylight hours to determine whether conditions appear to be normal or abnormal. If the emissions appear to be abnormal, the permittee must then comply with the deviation recordkeeping and reporting described in Section D.5 of this permit.

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 26 of 27

GACT1 (EP-3 and EP-4) Two 1630 hp Diesel Generators:

Narrative Requirements:		
Monitoring:		
Condition No.	Condition	
T-1	Monitoring: The pemittee shall monitor the amout of fuel usage on a monthly basis.	
Recordkeeping Requirements:		
Condition No.	Condition	
T-2	Recordkeeping Requirements: The permittee shall maintain records of the amount of fuel usage on a monthly basis.	

Henderson Municipal Power & Light, Station 1 Facility Requirements

Activity ID No.: APE20040001

Page 27 of 27

Narrative Requirements:

Condition
No. Condition

T-1

GACT2 (Insignificant Activities) Insignificant Activities 1 - 4:

The activities within this group have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020 Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. [401 KAR 52:020 Section 6]